

Modern pentathlon exercise and drills

Modern pentathlon is a demanding sport that combines five disciplines: fencing, swimming, running, shooting, and, in recent updates, obstacle racing^{[1][2]}. Effective training requires a blend of technical drills, physical conditioning, and mental preparation for each event. Below are key exercises and drills for each discipline, including the new obstacle component:

1. Swimming

- Focus on **short**, **high-intensity sets** to build speed and stamina.
- Emphasize technique drills (e.g., streamline, turns, and starts).
- Practice transitions to simulate race conditions^[1].

2. Running

- Prioritize interval training with short, fast distances to improve speed and recovery.
- Incorporate **brick sessions** (run immediately after swimming or shooting) to mimic competition fatigue^[1].

3. Shooting (Laser Pistol)

- Practice static shooting for accuracy.
- Train **dynamic shooting**: shoot after running or other exercises to simulate elevated heart rate.
- Use **movement drills**: shoot, run, shoot again, to prepare for the combined event^[1].

4. Fencing (Épée)

- Start with basic footwork and blade work drills.
- Progress to **one-touch bouts** to develop tactical decision-making.
- Participate in fencing competitions or tetrathlons to gain experience^[1].

5. Obstacle Racing

- Focus on **joint stability/mobility** (e.g., scapular and lumbar stability, thoracic and shoulder mobility).
- Develop **proprioception** with balance and coordination drills.
- **Grip strength training** is crucial:
 - o **Dead hangs** (various grips: fingertip, bent arm, single arm, knee tucked)
 - o **Pinch grip exercises** (holding weight plates)
 - o Finger rubber band extensions^[2]

Sample Obstacle Session (adapted from UIPM guidelines)[2]:

- Warm-up: 10 min easy jog + ballistic exercises
- **Joint mobility/stretching:** 10 min (neck, shoulders, wrists, etc.)
- **Grip & stability:** 5 min (dead hangs, rope pull-ups, shoulder taps, chin-ups)
- Monkey bars: 15 min (two hands, single hand, skipping bars)
- **Balance drills:** 15 min (bosu balance, single-leg jumps, beam walks)
- **Rings:** 15 min (dead hangs, alternate hands, skipping rings)
- **Walls:** 15 min (pull-up and leg over, curved wall techniques)

General Tips

- For beginners, start with **biathle** (run-swim-run), **triathle** (swim-run-shoot), or **laser run** (run-shoot) to build foundational skills before tackling all five events^[1].
- Training should be **progressive and varied**, adapting to the athlete's age and experience^[2].
- Mental preparation is essential; simulate competition conditions as often as possible.

At-Home and Indoor Training

- Use bodyweight exercises and home equipment (e.g., resistance bands, dumbbells) for strength and conditioning^{[3][4]}.
- Practice **shadow fencing**, **dryland swim drills**, and **laser shooting** with a home target^{[3][4]}.

This multi-faceted approach ensures balanced development across all modern pentathlon disciplines, enhancing both technical proficiency and overall athleticism^{[1][2]}.

Bodybuilding &CrossFit for this sets and reps durations

Bodybuilding and **CrossFit** utilize different set, rep, and duration schemes tailored to their unique goals and training styles.

Bodybuilding: Sets, Reps, and Durations

Goal	Reps per Set	Sets per Exercise	Rest Between Sets	Weight Used
Strength	1-6	2-5	3-5 min	Heavy (85-100% 1RM)
Hypertrophy	6-12	3-5	1-2 min	Moderate (65- 85%)
Endurance	15+	2-4	30-60 sec	Light (<65%)

- **Strength**: Low reps, high weight, long rest.
- **Hypertrophy**: Moderate reps/weight, moderate rest—this is the classic bodybuilding approach.
- Endurance: High reps, light weight, short rest^{[5][6]}.
- Adjusting sets and reps can target different adaptations and prevent plateaus.
- **Time under tension** (how long the muscle is working) is also important for muscle growth^[7].

CrossFit: Sets, Reps, and Durations

CrossFit programming is highly variable and often uses both **rep-based** and **time-based** sets:

Workout Type	Common Rep Scheme	Duration/Rest	Example Format
Benchmark (e.g., Fran)	21-15-9	For time	21 thrusters, 21 pull- ups, then 15, then 9 ^[8]

AMRAP	Varies (moderate/high)	As many rounds as possible in set time (e.g., 20 min)	Cindy: 5 pull-ups, 10 push-ups, 15 squats, repeat ^[8]
EMOM/Death By	Ascending reps each minute	1 min per round	1 rep first min, 2 reps second, etc. ^[8]
Chipper	High total reps (e.g., 50, 100)	For time	100 pull-ups, 100 push- ups, etc.

- **Rest periods** are often minimal or dictated by the workout structure (e.g., you rest only as needed to keep moving).
- **Intensity** is kept high, with workouts often scored by time or total reps completed.
- CrossFit uses both fixed rep schemes (like 5x5) and variable, task-based schemes (AMRAP, EMOM, RFT)[8].
- **Time-based sets** (e.g., max reps in 1 minute) are also common, especially for bodyweight or lighter movements^{[7][8]}.

Key Differences

Bodybuilding	CrossFit	
Focus on muscle size and symmetry	Focus on functional fitness and conditioning	
Structured sets/reps/rest	Variable, often task- or time-based	
Moderate tempo, controlled reps	High intensity, often for speed or reps	
Rest is longer for strength	Rest is minimal, often only as needed	

Practical Application

- For **bodybuilding**, stick to 3–5 sets of 6–12 reps for most exercises, resting 1–2 minutes between sets for muscle growth^{[5][6]}.
- For **CrossFit**, expect workouts to prescribe rep schemes like 21-15-9, AMRAP (as many rounds as possible) in 10-20 minutes, or EMOM (every minute on the minute) with ascending reps^[8].
- Both approaches benefit from varying sets, reps, and rest to optimize adaptation and avoid plateaus^{[5][7][6]}.

If you have specific goals (e.g., strength, endurance, muscle size), tailor your set and rep scheme accordingly. CrossFit's variety can complement bodybuilding by improving conditioning and functional strength, while bodybuilding's structure can enhance muscle growth and joint health for CrossFitters.



- 1. https://www.marnys.com/en/magazine/modern-pentathlon-how-does-a-pentathlete-train/
- 2. https://www.fppm.pt/pentatlomoderno/UIPM_Obstacle_Training_Tips_1_0.pdf
- 3. https://www.olympics.com/en/video/home-workout-with-oktawia-nowacka-modern-pentathlon-training-at-home/
- 4. https://www.olympics.com/en/video/watch-pentathlete-train-home-nowacka
- 5. https://www.onelifefitness.com/news/gym-reps-sets-ultimate-guide
- 6. https://crossfitactus.com/uncategorized/how-many-reps-should-i-be-doing/
- 7. https://www.issaonline.com/blog/post/time-based-vs-rep-based-sets-which-is-best-for-your-goals
- 8. https://www.sandandsteelfitness.com/25-crossfit-workout-programming-examples/